AMENDMENTS TO THE CLAIMS

IN THE CLAIMS

Please amend claims 19 and 20 as indicated below:

1. (Previously Amended) A radially expandable fluid delivery device comprising:

a member constructed of a biocompatible material, the member having a longitudinal axis and a wall having a thickness extending between an inner and an outer surface, the wall being formed of a microstructure of nodes interconnected by fibrils, the member being deployable from a first, reduced diameter configuration to a second, increased diameter configuration,

wherein the wall of the member includes at least one microporous portion of micro-channels formed by the microstructure having a porosity sufficient for a fluid to expand the fluid delivery device and permeate through the micro-channels, substantially controlling the permeation of fluid through the wall.

2. (Original) The fluid delivery device of claim 1, wherein the biocompatible material is ePTFE.

3. (Original) The fluid delivery device of claim 1, wherein the member has a hydrophilic exterior surface.

4. (Original) The fluid delivery device of claim 1, wherein the member has a hydrophobic exterior surface.

5. (Original) The fluid delivery device of claim 1, wherein the nodes within the microporous portion are separated by an internodal distance, the internodal distance being approximately 1μm - 150μm.

6. (Original) The fluid delivery device of claim 1, wherein substantially all of the nodes within the microporous portion are oriented such that spaces between the nodes form micro-channels extending from the inner surface to the outer surface of the wall.

7. (Original) The fluid delivery device of claim 1, wherein the nodes within the microporous portion are oriented substantially perpendicular to the longitudinal axis of the member.

8. (Original) The fluid delivery device of claim 1, wherein the micro-channels within the microporous portion of the wall are sized to permit the fluid to pass from the inner surface to the outer surface of the wall.

9. (Original) The fluid delivery device of claim 8, wherein the size of the micro-channels varies longitudinally.

10. (Original) The fluid delivery device of claim 8, wherein the size of the micro-channels varies circumferentially.

11. (Original) The fluid delivery device of claim 1, wherein the member deploys to the second configuration upon application of a fluid having a pressure of approximately 1 psi to 250 psi.

12. (Original) The fluid delivery device of claim 1, wherein the microporous portion of the wall has a porosity sufficient to allow fluid to pass therethrough at a flow rate of approximately 0.01 ml/min to 100 ml/min.

13. (Original) The fluid delivery device of claim 1, wherein the member has a unitary construction of generally homogenous material.

14. (Original) The fluid delivery device of claim 1, wherein the fluid includes a medicinal agent.

15. (Original) The fluid delivery device of claim 14, wherein the medicinal agent is selected from the group consisting of thrombolytics, antibiotics, antisense oligonucleaotides, chemotherapeutics, surfactants, diagnostic agents, steroids, vasodilators, vasoconstrictors, and embolic agents.

16. (Original) The fluid delivery device of claim 1, wherein the microporous portion of the wall borders a second portion of the wall that is generally impermeable to the pressurized fluid.

17. (Original) The fluid delivery device of claim 1, wherein the wall further includes a second microporous portion having a porosity sufficient for the fluid to permeate through the wall.

18. (Original) The fluid delivery device of claim 17, wherein an impermeable portion of the wall is interposed between the microporous portion and the second microporous portion of the wall.

19. (Currently Amended) The fluid delivery device of claim 17, wherein the second microporous portion is spaced longitudinally from the at least one microporous portion.

20. (Currently Amended) The fluid delivery device of claim 17, wherein the second microporous portion is spaced circumferentially from the at least one microporous portion.

21. (Original) The fluid delivery device of claim 1, wherein the microporous portion has a hydraulic conductivity less than 1000 (cm^4/ (dyne* s)* 10^{12}).

22. (Original) The fluid delivery device of claim 21, wherein the hydraulic conductivity is less than 500 (cm^4/ (dyne* s)* 10^{12}).

23. (Original) The fluid delivery device of claim 21, wherein the hydraulic conductivity is less than 100 (cm^4/ (dyne* s)* 10^{12}).

24. (Original) The fluid delivery device of claim 1, wherein the fluid delivery device is a medical treatment device for treating a body vessel, the microporous portion has a hydraulic conductivity less than the hydraulic conductivity of the body vessel.

25. (Previously Amended) An expandable drug delivery device comprising:

a member constructed of a biocompatible fluoropolymer material, the member having a longitudinal axis and a wall having a thickness extending between an inner and an outer surface, the wall being formed of a microstructure of nodes interconnected by fibrils, the member being deployable from a first, reduced diameter configuration to a second, increased diameter configuration upon application of an expansion force to the lumen, a least a portion of the wall having nodes oriented such that spaces between the nodes form generally aligned micro-channels oriented and extending from the inner surface to the outer surface of the wall, the micro-channels being sized to permit fluid including a therapeutic agent to expand the drug delivery device and permeate from the inner surface to the outer surface of the wall.

26. (Previously Amended) A radially expandable fluid delivery device comprising:

a member constructed of a biocompatible fluoropolymer material, the member having a longitudinal axis and a wall having a thickness extending between an inner and an outer surface, the wall being formed of a microstructure of nodes interconnected by fibrils, the member being deployable from a first, reduced diameter configuration to a second, increased diameter configuration upon application of an expansion force,

wherein the wall of the member includes a first microporous portion of micro-channels formed by the microstructure having a porosity sufficient for a fluid to expand

the fluid delivery device and permeate through the wall, and a second microporous portion of micro-channels formed by the microstructure spaced apart from the first microporous portion and having a porosity sufficient for a fluid to expand the fluid delivery device and permeate through the wall.

27. (Previously Amended) A radially expandable fluid delivery device comprising:

a member constructed of a biocompatible fluoropolymer material, the tubular member having a longitudinal axis and a wall having a thickness extending between an inner and an outer surface, the wall being formed of a microstructure of nodes interconnected by fibrils, the member being deployable from a first, reduced diameter configuration to a second, increased diameter configuration upon application of an expansion force from a fluid, the wall including a microporous portion having nodes oriented such that spaces between the nodes form micro-channels extending from the inner surface to the outer surface of the wall, the micro-channels being sized to permit the fluid to permeate from the inner surface to the outer surface of the wall,

wherein the size of the micro-channels varies circumferentially about the tubular member to provide regions of greater porosity within the microporous portion.

28. (Previously Canceled)

29. (Previously Canceled)

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41. (Previously Canceled)

42. (Previously Canceled)

43. (Previously Canceled)

44. (Previously Amended) A medical treatment device comprising:

a catheter having an elongated hollow tube defining an inflation lumen extending from a proximal end to a distal end, and

a balloon constructed of a biocompatible fluoropolymer material and attached to the distal end of the tube, the balloon having a wall having a thickness extending between an inner and an outer surface and a lumen in fluid communication with the inflation lumen of the catheter, the wall being formed of a microstructure of nodes interconnected by fibrils, the balloon being deployable from a first, reduced diameter configuration to a second, increased diameter configuration,

wherein the wall of the balloon includes at least one microporous portion of micro-channels formed by the microstructure having a porosity sufficient for a fluid to expand the medical treatment device and permeate through the wall, substantially all of the nodes within the microporous portion being oriented substantially perpendicular to the longitudinal axis of the balloon.

45. (Previously Amended) A radially expandable fluid delivery device having a longitudinal axis and a wall transverse to the longitudinal axis, the fluid delivery device comprising:

a first layer of biocompatible material being formed of a microstructure of nodes interconnected by fibrils, and

a second layer of biocompatible material being formed of a microstructure of nodes interconnected by fibrils, the second layer overlying the first layer, the wall of the fluid delivery device extending between an inner surface of the first layer and an outer surface of the second layer, the fluid delivery device being deployable from a first, reduced diameter configuration to a second, increased diameter configuration,

wherein the wall of the fluid delivery device is formed of at least one microporous portion having a porosity sufficient for a fluid to permeate through the wall, substantially all of the nodes within the microporous portion being oriented such that spaces between the nodes form generally aligned micro-channels oriented and extending from the inner surface of the first layer to the outer surface of the second layer, the micro-channels being sized to permit fluid to expand the fluid delivery device and permeate from the inner surface of the first layer to the outer surface of the second layer.

46. (Original) The fluid delivery device of claim 45, wherein substantially all of the nodes within the microporous portion being are substantially perpendicular to the longitudinal axis of the member.

47. (Original) The fluid delivery device of claim 45, wherein the micro-channels within the first layer are sized differently than the micro-channels within the second layer.

48. (Original) The fluid delivery device of claim 45, wherein the node in the first layer are separated by a first internodal distance and the nodes in second layer are separated by a second internodal distance, wherein the first internodal distance is different from the second internodal distance.

49. (Original) The fluid delivery device of claim 45, wherein the biocompatible material of the first layer is different than the biocompatible material of the second layer.

50. (Previously Amended) A radially expandable fluid delivery device comprising:

a member constructed of a biocompatible material, the member having a longitudinal axis and a wall being formed of a microstructure of nodes interconnected by fibrils, the member being deployable from a first, reduced diameter configuration to a second, increased diameter configuration,

wherein the wall of the member includes at least one microporous portion of micro-channels formed by the microstructure having a porosity sufficient for a fluid to expand the fluid delivery device and permeate through the wall, the microporous portion having a hydraulic conductivity less than 1000 (cm^4/ (dyne* s)* 10^{12}).

51. (Original) The fluid delivery device of claim 50, wherein the hydraulic conductivity is less than 500 (cm^4/ (dyne* s)* 10^{12}).

52. (Original) The fluid delivery device of claim 50, wherein the hydraulic conductivity is less than 100 (cm^4/ (dyne* s)* 10^{12}).